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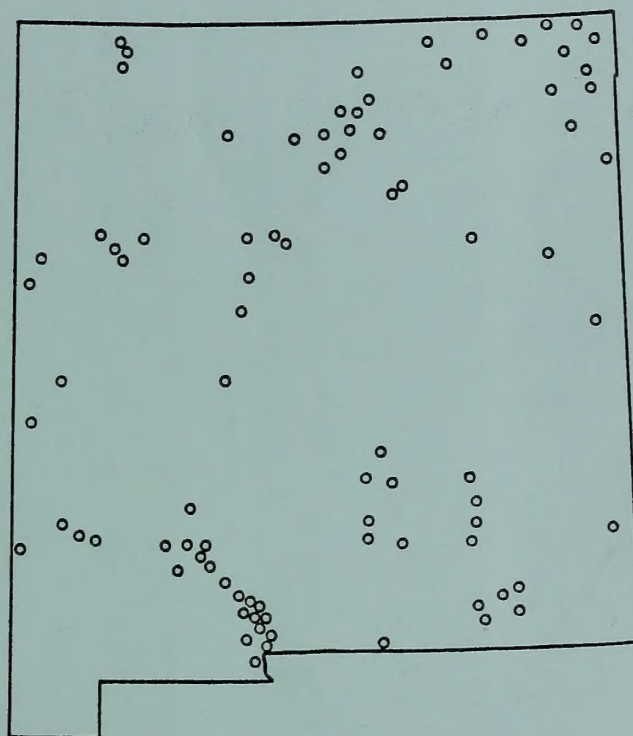
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United States
Department of
Agriculture

Soil
Conservation
Service

Albuquerque
New Mexico

The Status of Watershed Projects in New Mexico



January 1989

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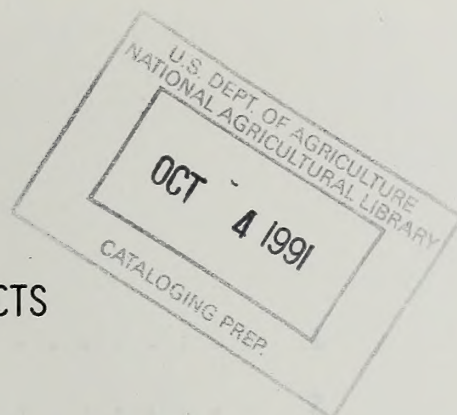
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THE WATERSHED PROTECTION
AND FLOOD PREVENTION PROGRAM
IN NEW MEXICO

The Watershed Protection and Flood Prevention Act (Public Law 83-566) was passed by Congress in 1954. One year after this Act was passed, Congress authorized work on approximately 60 small watersheds to serve as demonstration or "Pilot" projects. Two of these pilot projects were completed in New Mexico, and they are Sandia Mountain Tribs. and Upper Rio Hondo Tribs.

The Watershed Protection and Flood Prevention Act provides authority to the Secretary of Agriculture to provide technical, financial, and credit assistance to local organizations in planning and carrying out watershed projects. Within the Department of Agriculture, this program is administered by the Soil Conservation Service. The State Engineer Office has been designated by the Governor of New Mexico as the state agency responsible for this program.

All applications for watershed projects are submitted to the State Engineer and are approved by him prior to acceptance by the Soil Conservation Service. The State Engineer also determines priority for applications to receiving planning assistance. He also reviews and approves the watershed work plan, and issues construction permits for necessary structural works.

Watershed projects provide for a project-type approach to soil and water resource development, use, and conservation. Initiative and control are in the hands of local organizations which are composed of people within the watershed area. Application for a watershed project may be submitted by local organizations having authority under state law to construct, maintain, and operate works of improvement. At least one of the sponsoring organizations must have the powers of taxation and eminent domain unless the project works consist only of land treatment.

To facilitate the watershed program in areas where there are no local organizations with the necessary power, the New Mexico State Legislature passed the Watershed District Act (House Bill 161) in 1957. This Act authorized procedures for establishing watershed districts to carry out the required local responsibilities in connection with works of improvement for watershed protection and flood prevention.

Each watershed project will provide for proper land use and treatment as well as other purposes, such as flood prevention, irrigation, drainage, fish and wildlife development, municipal water supply, or other phases of water management. Needed land treatment measures must be included in the project. The objectives of the local organization are a factor in planning the works of improvement.

LOCAL RESPONSIBILITIES

Since the watershed projects are local in nature, public assistance is provided to help the local people carry out projects which require group action beyond capabilities of the local people. To be eligible for this assistance, the local people and the sponsoring organizations are responsible for the following actions:

1. Inform local people of the program to insure that concerned landowners understand the need and opportunities under the program and that local people will provide support for the project.
2. Prepare and submit the application for assistance. Leadership in preparing and submitting the application is usually provided by the supervisors of the local natural resource conservation district.
3. Take the lead in developing a plan for the project with assistance from the Soil Conservation Service and other appropriate agencies.
4. Provide land easements and rights-of-way for all structural works of improvement.

5. Plan and establish conservation measures on private land. At least 50 percent of the land area above any structural measure must be under a conservation agreement with the local soil and water conservation district.

6. Provide all necessary water rights and permits to store water where applicable.

7. Pay the local share of costs for measures whose purpose is agricultural water management, fish and wildlife development, or recreation.

8. Pay all of the cost of water storage allocated to municipal and industrial use.

9. Operate and maintain all structures built as part of the project and maintain conservation measures installed on private land.

FEDERAL RESPONSIBILITIES

1. The Soil Conservation Service provides technical assistance in conservation planning and application of land treatment measures.

2. The Farmers Home Administration makes loans available to qualified local organizations for watershed projects.

3. The Soil Conservation Service pays all construction and installation costs allocated to the purpose of flood prevention.

4. The Soil Conservation Service pays the federal share of construction costs and provides all necessary installation services, such as detailed plans and designs and supervision of construction for measures whose purpose is agricultural water management, fish and wildlife development, or recreation.

5. The Soil Conservation Service provides contractual services during construction.

6. The Soil Conservation Service provides technical assistance on operation and maintenance of completed land treatment and structural measures.

PROGRESS IN THE WATERSHED PROGRAM IN NEW MEXICO

New Mexico varies in average annual precipitation from 7 to 30 inches per year. Yet, even in the 7-inch rainfall areas, flash floods occur up and down the watercourses. This results in serious flood damages, hazard to life, and severe sediment and erosion problems. In contrast, droughts are also very common. Vegetative cover is seriously depleted, and wind erosion sets in. Therefore, water conservation for agriculture and rural communities, reduction of flood damage, control of erosion, improved recreation, and improved habitat for birds and wildlife are all needs for a more abundant life in New Mexico.

Wise management of our soil and water resources through sound conservation practices is the goal of the Small Watershed Program. The residents and governmental bodies of New Mexico have recognized this programs as a means of solving many of their problems relating to conservation, watershed protection, and flood prevention. As of September 30, 1988, a total of 89 applications covering 8,821,420 acres had been received and approved by the New Mexico State Engineer. Forty-two watershed projects have been authorized for watershed plan development, of which, 30 have been authorized for construction. Of these 30 watershed projects, 18 have been completed, two have been deauthorized, nine are in the design and construction phase, and one has been placed in inactive status.

Applications have been submitted on watershed projects in 29 of the 33 counties in New Mexico. Out of the 47 soil and water conservation districts in the state, 33 have sponsored watershed application. Other sponsors include towns, cities, county commissions, irrigation districts, conservancy districts, watershed districts, state agencies, and Indian tribal councils.

Since 1963, the State of New Mexico has provided funds through state agencies to accelerate watershed project planning within the state. The International Boundary and Water Commission has also provided funds to the Soil Conservation Service for work plan development on selected watersheds in Dona Ana and Sierra Counties. The additional funds from these two sources accelerated the development rate for watershed plans in New Mexico.

By 1978 New Mexico had a significant number of projects authorized for construction. Therefore, in 1979 the Soil Conservation Service in New Mexico changed the program emphasis from project planning to design and construction. The ten operational watershed projects are briefly summarized on the following pages. Tables 1, 2, and 3 which follow these summaries list the projects and other pertinent information. Table 1 summarizes the completed and operational projects. Table 2 summarizes the projects authorized for planning, and Table 3 summarizes all project applications. A map showing the location and status of projects in New Mexico is located at the back of this publication.

NEW MEXICO

Project Code 2803

CORNUDAS, NORTH AND CULP DRAWS WATERSHED PROJECT (PL-566)

Fiscal Year 1988

OTERO COUNTY, NEW MEXICO; HUDSPETH COUNTY, TEXAS

Project in Brief

The project was authorized for operation in April 1974. Area--177,600 acres (140,250 acres in New Mexico and 37,350 acres located in Texas). Federal land--50,000 acres; state owned--37,500 acres. The federal and state lands are all in New Mexico. Privately owned land--90,100 acres. Land use in the watershed--9 percent irrigated cropland, 90 percent rangeland, and 1 percent miscellaneous uses such as roads and farmsteads. Sponsors--Otero Soil and Water Conservation District; El Paso-Hudspeth Soil and Water Conservation District; Otero County Commission, New Mexico; Hudspeth County Commissioners Court, Texas; Hudspeth County Underground Water Conservation District No. 1; and the City of Dell City, Texas. Estimated total cost of the project--\$3,215,070 (\$1,430,863 New Mexico and \$1,784,207 Texas). Of the total \$1,671,740 PL-566 costs and \$1,543,330 other. Principal problems--frequent damages from floodwater, sediment, and scour that occur on 14,173 acres of highly productive floodplain.

Progress in Land Treatment

There are 62 operating units located wholly or partially within the watershed. Soil and water conservation plans have been developed on 50 of these, representing about 64 percent of the agricultural land in the watershed. It is estimated that needed land treatment has been applied to about 40 percent of the agricultural land. About 33 percent of the land is adequately protected. In the New Mexico portion of the watershed, there are 17 operating units. Twelve of these are district cooperators. Eleven have developed conservation plans.

Progress in Structural Measures

The planned structural measures included in the plan consist of two floodwater retarding structures. One of these structures is located in New Mexico and one in Texas. The structure in Texas has been constructed.

Progress in Obtaining Easements and Rights-of-Way

The sponsors are working on the needed landrights. State land leases have changed hands and sponsors are in the progress of acquiring the state land easements. The BLM easements that the sponsors had have expired, but can be re-acquired.

January 1989

NEW MEXICO

Project Code 2025

CORRALES WATERSHED PROJECT (PL-566)

Fiscal Year 1988

BERNALILLO AND SANDOVAL COUNTIES, NEW MEXICO

Project in Brief

This project was approved for operations in May 1970. Sponsors--Central Rio Grande Soil and Water Conservation District, Corrales Watershed District, and Albuquerque Metropolitan Arroyo Flood Control Authority. Area--54,720 acres (94.1 percent private, 5.6 percent state, and 0.3 percent Indian land). The land use in the watershed is 5.9 percent rangeland, 3.8 percent irrigated cropland, and 90.3 percent miscellaneous. The miscellaneous land is identified as present and future residential areas, roads, irrigation facilities, commercial, and idle land. The estimated cost of the project is \$16,700,000 of which \$15,000,000 will be PL-566 funds and \$1,700,000 will be other funds.

Progress on Land Treatment

The estimated cost of land treatment to be installed is \$181,500, of which \$181,500 will be other than PL-566 funds. There are 123 operating units varying in size. Of these, 48 landowners are presently cooperators with the Central Rio Grande Soil and Water Conservation District. Ninety percent of the land is adequately treated.

Progress on Structural Measures

Structural measures to be installed include two floodwater diversions. Construction was started in Fiscal Year 1972 with preliminary excavation to correct an existing gas pipeline. Construction of Floodwater Diversion No. 2 is complete. Floodwater Diversion No. 1 was split into two phase construction. Construction of Phase I is complete. Phase II is scheduled for construction in FY 1990. A landscaping contract will follow in FY-1991.

Progress in Obtaining Land Easements and Rights-of-Way

The sponsors have obtained the necessary landrights and easements by either title fee or condemnation. The professional engineering firm of Bohannon-Houston completed the property maps for use by the title company and the appraiser. Relocation has been completed. Two individuals were relocated at a cost of \$26,154. SCS's share of that total was \$23,013.

January 1989

NEW MEXICO

Project Code 2028

COTTONWOOD-WALNUT CREEK WATERSHED (PL-566)

Fiscal Year 1988

CHAVES AND EDDY COUNTIES, NEW MEXICO

Project in Brief

The project was approved for operations in June 1976. Area--228,326 acres (53.8 percent privately owned, 16.4 percent state owned, and 29.8 percent federal land administered by the Bureau of Land Management). Sponsors--Cottonwood-Walnut Creek Watershed District, Central Valley Soil and Water Conservation District, Penasco Soil and Water Conservation District, Hagerman-Dexter Soil and Water Conservation District, New Mexico Game and Fish Department, and New Mexico Park and Recreation Division. Estimated total cost of project--\$24,630,000. Principal problems--flooding of cropland and a demand for recreation in an area deficient in recreational facilities. The land use in the watershed is 85.5 percent rangeland, 10.6 percent cropland, and 3.9 percent urban, farmsteads, roads, and miscellaneous uses.

Progress in Land Treatment

The estimated cost of land treatment to be installed is \$2,254,500, of which \$2,172,200 will be other than PL-566 funds. Irrigated cropland is divided into 112 operating units that range in size from 80 acres to 1,000 acres. The typical size of farm units in the irrigated portion of the watershed is 320 acres. There are 18 ranches in the area with an average size of 11,000 acres. There are 101 cooperators, and 80 have basic conservation plans. Approximately 89 percent of the watershed area is covered by District Cooperative Agreements, and 75 percent of the planned practices are presently applied.

Progress in Structural Measures

Structural measures to be installed include two floodwater retarding structures, one multiple-purpose structure for flood prevention and recreation with associated basic recreation facilities, and one channel. The multiple-purpose structure will have 3,007 acre-feet capacity for floodwater detention and sediment storage and provide for 1,143 acre-feet of storage in the recreation pool. Construction of Site 6 is complete. Construction of Site 8, Phase I, is complete, and Phase II, final phase, is scheduled for construction in FY 1989. The multiple-purpose structure remains to be designed and built. Construction of the multi-purpose structure is scheduled for FY 1995.

Progress in Obtaining Easements and Rights-of-Way

All state lands have been purchased and the State Land Commissioner has excluded required areas from leasing of mineral rights. The sponsors have all landrights for Site 8, landrights for Site 19 have been obtained in accordance with the Landrights Work Map. Cultural Resources are being surveyed on Site 19 and mitigation will be required.

January 1989

NEW MEXICO

Project Code 2021

CROW AND BROAD CANYONS AND PLACITAS ARROYO WATERSHED PROJECT (PL-566)

Fiscal Year 1988

DONA ANA AND SIERRA COUNTIES, NEW MEXICO

Project in Brief

The project was approved for operations in August 1966. Area--137,932 acres (9 percent privately owned, 65 percent federal land administered by the Bureau of Land Management, and 26 percent state owned). Sponsors--Elephant Butte Irrigation District and Caballo Soil and Water Conservation District. Estimated total cost of project--\$2,915,808 (\$2,837,416 PL-566 and other 80,392). Principal problems--floodwater damage to irrigated cropland, highways, a railroad, irrigation facilities, and the town of Hatch. The watershed also contributes to flood volumes downstream on the Rio Grande. Sediment deposition in the channel of the Rio Grande is the major problem. This sediment must be removed by the United States section of the International Boundary and Water Commission in order to maintain the designed channel of the Rio Grande.

Progress in Land Treatment

Of 32 operating units, 16 are district cooperators with 14 of them having basic conservation plans. These plans include 61,923 acres planned with the sponsoring soil and water conservation district. Proper use of rangelands is being practiced by the Bureau of Land Management and cooperating ranchers.

Progress in Structural Measures

Broad Canyon Site 1 was awarded in a contract involving \$455,000 in Fiscal Year 1969. Site 2A was awarded in the 1970 fiscal year, obligating \$964,087. An archaeological investigation has been completed for the Placitas Arroyo. The geologic investigation reports have been completed for four floodwater retarding sites in the Placitas Arroyo. Site 5 must be eliminated from the project because of site limitations created by a railroad track passing through the dam site. Investigations indicate that there is no feasible alternative for Site 5 and work on the project has been stopped. A supplement has been developed that deletes all remaining planned measures. The project was placed in inactive status as of October 1, 1987.

Progress in Obtaining Easements and Rights-of-Way

Four of the five original sites in the Placitas Arroyo portion have been cleared by the sponsoring local organizations.

January 1989

NEW MEXICO

Project Code 2027

EAGLE TUMBLEWEED DRAW WATERSHED PROJECT (PL-55)

Fiscal Year 1988

EDDY AND CHAVES COUNTIES, NEW MEXICO

Project in Brief

The project was approved for operations in October 1974. Area--184,400 acres (46.7 percent privately owned, 24.6 percent state owned, and 28.7 percent federal land administered by the Bureau of Land Management). Sponsors--City of Artesia, Central Valley Soil and Water Conservation District, Penasco Soil and Water Conservation District, and Artesia-Eagle Draw Flood District. Estimated total cost of project--\$15,134,700 (\$14,500,000 PL-566 and other \$634,700). Principal problems--flooding of large areas of the City of Artesia and adjacent high-value cropland with damages to urban and agricultural properties and crops. The land use in the watershed is 85.5 percent rangeland, 7.2 percent cropland, and 7.3 percent in miscellaneous use such as farmstead, roads, railroads, and urban developments.

Progress in Land Treatment

The estimated cost of land treatment to be installed is \$397,500, of which \$387,600 will be other than PL-566 funds. Irrigated cropland is divided into 139 operating units ranging in size from 20 acres to 640 acres. Average size farm operations in the irrigated portion is 185 acres. There are approximately 30 ranches in, or partially within, the watershed. Farmers and ranchers in the watershed have been assisted in the preparation of 99 basic conservation plans on 113,769 acres. Approximately 70 percent of the needed land treatment has been applied.

Progress on Structural Measures

Structural measures to be installed include one floodwater retarding dam with an outlet channel and two floodwater diversions. The floodwater retarding structure will store approximately 14,200 acre-feet of sediment and floodwater. Design is about 50 percent complete.

Progress in Obtaining Land Easements and Rights-of-Way

The sponsors are obtaining the easements by negotiating with Yates Petroleum, Gissler Ranches and others. A metes and bounds landrights survey has been completed by consultants for the sponsors. The agreed location of crossings, bridges, oil and gas lines is complete. The sponsors are near to obtaining all needed landrights and subordinations.

January 1989

NEW MEXICO

Project Code 2030

ESPANOLA-RIO CHAMA WATERSHED (PL-566)

Fiscal Year 1988

RIO ARriba AND SANDOVAL COUNTIES, NEW MEXICO

Project in Brief

The project was authorized for operation in September 1976. Area--27,520 acres or 43 square miles (26 percent privately owned, 24 percent administrated by the Bureau of Land Management, 10 percent by the U.S. Forest Service, 3 percent by the State of New Mexico, and 37 percent by Pueblos of Santa Clara and San Juan). Sponsors--Espanola-Rio Chama Watershed District, East Rio Arriba Soil and Water Conservation District, City of Espanola, and County of Rio Arriba, New Mexico. Estimated total cost of project--\$30,008,400 (\$29,310,000 PL-566 and other \$698,400). Principal problems--flooding of urban areas and agricultural cropland along the Rio Grande and the Rio Chama Rivers and erosion and sediment deposition. The land use in the watershed is 62 percent grazeable woodland, 26 percent rangeland, and 4 percent irrigated cropland, and 8 percent miscellaneous such as farmstead, roads, and urban development.

Progress in Land Treatment

The estimated cost of land treatment to be installed is \$719,300. This includes \$244,400 PL-566 assistance costs. The farm and ranches of the watershed are small family-size operations. The irrigated farms range in size from 0.2 acre to 41.2 acres, averaging 6.6 acres per farm. There are 79 irrigated farm operations on three community ditches. There are 13 active cooperators and 23 resource conservation plans. Sixty-one percent of the watershed lands are covered by conservation agreements, and 49 percent of the planned practices have been applied.

Progress in Structural Measures

Ten single-purpose floodwater retarding structures are planned on the major drainages of the watershed. The floodwater retarding structures will store approximately 5,063 acre-feet of sediment and floodwaters. Sediment storage will be 3,379 acre-feet of the total.

Progress in Obtaining Land Easements and Rights of Way

Landrights work maps have been delivered to the sponsors. Sponsors are waiting the outcome of PL-566 financial status before they proceed with the acquisition of easements. They have indicated a need to relocate or abandon two sites because of land acquisition problems. A supplement to the plan will be needed to evaluate the adjustment.

January 1989

NEW MEXICO

Project Code 2023

SEBASTIAN MARTIN-BLACK MESA WATERSHED PROJECT (PL-566)

Fiscal Year 1988

RIO ARRIBA COUNTY, NEW MEXICO

Project in Brief

This project was approved for operations in December 1969. Area--103,040 acres (25.7 percent private and state land, 63.4 percent federal and 10.9 percent Indian). Sponsors--East Rio Arriba Soil and Water Conservation District and the Upper Rio Grande Watershed District. Estimated total cost--\$9,342,957 (\$8,659,800 PL-566 and \$683,157 other). The principal purpose of the watershed project is for flood prevention. Land use--91.7 percent rangeland, 7.7 percent irrigated hayland and cropland, and 0.6 percent is miscellaneous land.

Progress in Land Treatment

Some acceleration of land treatment has resulted through increased technical assistance as a result of the Northern Rio Grande Resource Conservation and Development Project. Since initiation of planning, the Bureau of Land Management has done some effective work on its rangeland through pitting, contour furrowing, and seeding. There are 206 operating units with 75 district cooperators. Cooperators have prepared 63 conservation plans. It is estimated that 50,000 acres of land in the watershed are adequately protected.

Progress in Structural Measures

The watershed work plan includes 12 floodwater retarding structures with appurtenances, and one irrigation canal overshoot (Site 201). The work plan was amended to include additional sediment storage based on sediment yields experienced in the Santa Cruz River Watershed, which joins this project. Seven floodwater retarding structures and the irrigation canal crossing structure have been constructed. Sponsors have requested Sites 15, 16, and 17 be removed from the plan because of lack of support from the San Juan Pueblo. Sites 19 and 20 are not feasible nor defensible, and work on the project has been stopped. A supplement to delete all remaining work has been developed. The project was placed in inactive status as of November 14, 1988.

Progress in Obtaining Land Easements and Rights-of-Way

Eleven of twelve sites have been cleared by the sponsoring local organizations.

January 1989

NEW MEXICO

Project Code 2026

T OR C-WILLIAMSBURG ARROYOS WATERSHED PROJECT (PL-566)

Fiscal Year 1988

SIERRA COUNTY, NEW MEXICO

Project in Brief

The project was authorized for operation in November 1973. Area--19,050 acres or 29.8 square miles (27 percent privately owned, 13 percent state land, and 60 percent federally administered land). Sponsors--Sierra Soil and Water Conservation District, City of Truth or Consequences, and Village of Williamsburg. Land use--rangeland, 15,027 acres or 79 percent; urban and miscellaneous, 3,939 acres or 21 percent; and small acreage of irrigated land, 84 acres. Estimated total cost of project--\$11,000,000 (\$10,750,000 PL-566 and \$250,000 other). Principal problems--flood damage to urban and agricultural property with sediment deposition and erosion.

Progress in Land Treatment

Four basic conservation plans have been developed on 774 acres. A high percentage of the land is public domain that is administered by the Bureau of Land Management with grazing permits to individual ranchers. Minimum land treatment of proper grazing use has been applied on approximately 88 percent of all rangelands.

Progress in Structural Measures

The construction of one floodwater retarding structure and one outlet channel has been completed. Three floodwater retarding structures, two outlet channels, and one floodway remain to be constructed.

Progress in Obtaining Easements and Rights-of-Way

The sponsors are working on the needed landrights. Two floodwater retarding sites have been cleared. Some of the first landrights acquired have 10-year use clauses and will expire soon. They will have to be renewed to complete the project.

January 1989

NEW MEXICO

Project Code 2029

ZUNI PUEBLO WATERSHED (PL-566)

Fiscal Year 1988

MCKINLEY COUNTY, NEW MEXICO

Project in Brief

The project was approved for operations in June 1976. Area--12,786 acres (58 percent Zuni Indian Tribe and 42 percent State of New Mexico). Sponsors--Pueblo of Zuni and McKinley Soil and Water Conservation District. Estimated total cost of project--about \$10,000,000. Principal problems--major problems are floodwater and sediment damages to urban property within the Pueblo of Zuni and to irrigated agricultural lands and crops. The land use in the watershed--77.5 percent rangeland, 15.8 percent irrigated cropland, 3 percent pastureland, and 3.7 percent miscellaneous use. The area of miscellaneous use includes the 300 acres in the Pueblo of Zuni.

Progress in Land Treatment

The estimated cost of land treatment to be installed is \$965,900. This is \$39,100 on state land and \$926,800 for the Zuni Reservation lands. Approximately 40 percent of the rangeland within the Zuni Reservation has adequate cover to protect this land from erosion. A group of irrigators are organizing to install an irrigation delivery system.

Progress on Structural Measures

One floodwater retarding structure will be constructed to provide protection to floodplain lands. The structure will collect and control the sediment and runoff from 94 percent of the area contributing runoff into the problem area. Storage capacity--4,736 acre-feet total (3,913 acre-feet sediment storage, and 823 acre-feet for detention storage). An updated installation cost and request to proceed was sent to the National Office.

Progress in Obtaining Land Easements and Rights-of-Way

The sponsors are working on needed landrights. Extensive cultural resources exist in the watershed area and the proposed construction area. A mitigation plan for cultural resources is being prepared and should be released in Spring 1988.

January 1989

TABLE 1. OPERATIONAL AND COMPLETED PROJECTS
October 1988

Proj_No	Watershed Project Name	Operatl Date	Suppl't Date, No	Compl'd Date	Comment	Map_No
	Sandia Mountain Tribs			58-01	Pilot Watershed	P2
	Upper Rio Hondo Tribs			60-06	Pilot Watershed	P1
2003	Hatch Valley Arroyos	56-06		58-09		1
2004	Dona Ana Arroyos	56-07	77-04, #1	58-02	85-09 Reclosed	3
2005	Upper Rio Penasco	57-06		60-11		2
2006	Zuber Draw	58-03		60-11	83-04 Reopened	4
2007	Caballo Arroyos	58-05		60-09	87-03 Reclosed	31
2008	Tramperos Creek	58-07		61-03		13
2009	Prop Canyon and Tributaries	58-10	60-06, #1	61-09		24
2010	Saltpeter Creek	59-04	62-04, #1	64-06		7
2011	Pecos Arroyo	59-06		65-06	85-03 Reopened	15
2012	Santa Cruz River	59-08	77-05, #3	62-09	87-09 Reclosed	6
2013	Upper Gila Valley Arroyos No. 1	60-08		63-03		29
2014	Fillmore Arroyos	61-03		62-10		33
2015	Tortugas Arroyos	61-04		62-11		27
2016	Hackberry Draw	62-06		68-06	86-05 Reclosed	45
2017	Apache-Brazito-Mesquite Arroyos	63-05		68-06		38
2018	Avalon-Alacran	64-08	73-06, #1		83-10 Deauthorized	44
2020	Anthony Arroyo	65-05	72-03, #1	82-07		40
2019	Cass Draw	65-05	69-03, #1	70-04	83-04 Reopened	43
2021	Crow & Broad Canyons & Placitas Arroyo	66-08	70-04, #1		87-09 Inactive	56
2022	Sibley, Green, Jaralosa, & Candler Arroyos	69-08	88-01, #2	88-01		64
2023	Sebastian Martin-Black Mesa	69-12	77-06, #2			47
2025	Corrales	70-05	81-03, #4		88-11 Inactive	54
2802	Running Water Draw	70-05			72-05 Start	55
2024	Tucumcari Draw	70-05			TX2071, 73-10 Start	57
2026	T or C-Williamsburg Arroyos	73-11			78-06 Deauthorized	70
2803	Cornudas, North and Culp Draws	74-04			80-03 Start	69
2027	Eagle-Tumbleweed Draw	74-10			TX2078, 79-06 Start	72
2028	Cottonwood-Walnut Creek	76-06			Start not requested	52
2029	Zuni Pueblo	76-06			80-09 Start	84
2030	Espanola-Rio Chama	76-09			Start not requested	67

Total Number of Projects Approved for Installation is 30 plus two Pilot Watersheds.

TABLE 1 (Cont). OPERATIONAL AND COMPLETED PROJECTS
COST INFORMATION

Watershed Project Name	Cost_566	Cost_Other
Sandia Mountain Tribs	148628	36874
Upper Rio Hondo Tribs	647759	341304
Hatch Valley Arroyos	311407	47724
Dona Ana Arroyos	885252	51672
Upper Rio Penasco	395396	53740
Zuber Draw	512771	158492
Caballo Arroyos	594065	222335
Tramperos Creek	627725	75839
Prop Canyon and Tributaries	172159	23702
Saltpeter Creek	295177	48240
Pecos Arroyo	173675	48518
Santa Cruz River	12864854	142161
Upper Gila Valley Arroyos No. 1	437790	21924
Fillmore Arroyos	215822	40903
Tortugas Arroyos	295629	11535
Hackberry Draw	6739034	109160
Apache-Brazito-Mesquite Arroyos	666999	289404
Avalon-Allacran	92244	10000
Anthony Arroyo	850159	89098
Cass Draw	576182	113409
Crow & Broad Canyons & Placitas Arroyo	2837416	105900
Sibbey, Green, Jaralosa, & Candler Arroyos	6860198	139300
Sebastian Martin-Black Mesa	6594876	672157
Corrales	10371881	755498
Running Water Draw	1206385	1110000
Tucumcari Draw	55977	1000
T or C-Williamsburg Arroyos	9935611	210400
Cornudas, North and Culp Draws	26541	15000
Eagle-Tumbleweed Draw	1285817	634700
Cottonwood-Walnut Creek	13156289	3216800
Zuni Pueblo	294315	30000
Espanola-Rio Chama		
TOTALS	80,128,033	8,826,789

TABLE 1 (Cont). OPERATIONAL AND COMPLETED PROJECTS
GEOGRAPHICAL INFORMATION

Watershed Project Name	Area_Ac	County	Second_Co	Field_Office	SWCD
Sandia Mountain Tribs	21000	Sandoval		Albuquerque	Coronado
Upper Rio Hondo Tribs	256000	Lincoln		Capitan	Upper Hondo
Hatch Valley Arroyos	22500	Sierra	Dona Ana	T or C	Caballo
Dona Ana Arroyos	6950	Dona Ana		Las Cruces	La Union
Upper Rio Penasco	128000	Otero		Alamogordo	Otero
Zuber Draw	115840	Chaves		Hagerman	Hagerman-Dexter
Caballo Arroyos	7680	Sierra	Dona Ana	T or C	Caballo
Tramperos Creek	136320	Union	Harding	Roy	Ute Creek
Prop Canyon and Tributaries	19162	Cibola		Grants	Lava
Salt Peter Creek	32320	Colfax		Raton	Colfax
Pecos Arroyo	47808	San Miguel		Las Vegas	Tierra y Montes
Santa Cruz River	117184	Santa Fe		Santa Fe	Santa Fe-Pojoaque
Upper Gila Valley Arroyos No. 1	27000	Grant	Rio Arriba	Silver City	Grant
Fillmore Arroyos	16292	Dona Ana		Las Cruces	La Union
Tortugas Arroyos	15584	Dona Ana		Las Cruces	La Union
Hackberry Draw	13760	Eddy		Carlsbad	Carlsbad
Apache-Brazito-Mesquite Arroyos	39660	Dona Ana		Las Cruces	La Union
Avalon-Atacran	8640	Eddy		Carlsbad	Carlsbad
Anthony Arroyo	4032	Dona Ana		Las Cruces	La Union
Cass Draw	31494	Eddy		Carlsbad	Carlsbad
Crow & Broad Canyons & Placitas Arroyo	137932	Dona Ana	Sierra	T or C	Caballo
Sibley, Green, Jaralosa, & Candler Arroyos	120876	Dona Ana	Sierra	T or C	Caballo
Sebastian Martin-Black Mesa	103040	Rio Arriba		Espanola	East Rio Arriba
Corrales	54720	Sandoval	Bernalillo	Albuquerque	Central Rio Grande
Running Water Draw	227782	Parmer, TX	Curry	Clovis	Central Curry
Tucumcari Draw	10781	Quay		Tucumcari	Canadian River
T or C-Williamsburg Arroyos	19050	Sierra		T or C	Sierra
Cornudas, North and Culp Draws	177600	Hudspeth, TX	Otero	Alamogordo	Otero
Eagle-Tumbleweed Draw	184400	Chaves	Eddy	Artesia	Central Valley
Cottonwood-Walnut Creek	228326	Eddy	Chaves	Artesia	Central Valley
Zuni Pueblo	12786	McKinley		Gallup	McKinley
Espanola-Rio Chama	27520	Rio Arriba		Espanola	East Rio Arriba

Total Area included in Operational and Completed Projects is 2,372,039 Acres.

TABLE 2. PROJECTS AUTHORIZED FOR PLANNING

October 1988

Watershed Project Name	Auth'n Date	Work_Plan Date	Comment	Map_No	Proj_No
Sandia Mountain Tribs	55	55-02	Pilot Watershed	P2	
Upper Rio Hondo Tribs	55	61-07	Pilot Watershed	P1	
Hatch Valley Arroyos	55-01	55-10		1	
Dona Ana Arroyos	55-07	56-04		3	
Upper Rio Penasco	55-07	57-05		2	
Zuber Draw	56-02	57-10		4	
Tramperos Creek	56-03	58-04		13	
Upper Dry Cimarron	56-09		61-09 Terminated	17	
Pojoaque Creek	56-10		61-02 Terminated	5	
Santa Cruz River	56-10	59-04		6	
Pecos Arroyo	57-06	59-04		15	
Prop Canyon and Tributaries	57-06	58-10		24	
Saltpeter Creek	57-06	59-04		7	
Caballo Arroyos	58-01	58-05		31	
Upper Gila Valley Arroyos No. 1	58-09	60-03		29	
Tortugas Arroyos	59-02	59-10		27	
Filmore Arroyos	59-10	61-03		33	
Lemitar-Polvadera	59-10		61-09 Terminated, Combined into #87	36	
North Dry Cimarron	59-12		61-09 Terminated	16	
South Dry Cimarron	59-12		61-09 Terminated	14	
Bloomfield Arroyo	60-11		63-01 Terminated	10	
Hackberry Draw	61-04	62-04		45	
Apache-Brazito-Mesquite Arroyos	61-12	62-11		38	
Avalon-Alacran	61-12	64-06		44	
Cass Draw	61-12	64-04		43	
Upper Frisco	62-05		66-03 Terminated	25	
Anthony Arroyo	63-01	65-04		40	
Eagle Creek	63-04		65-01 Terminated, Combined into #80	50	
Lauson-Breedlove Arroyo	63-04		71-11 Terminated	39	
Sebastian Martin-Black Mesa	63-08	86-05		47	
Corrales	63-11	68-09		54	
Sibley, Green, Jaralosa, & Candler Arroyos	64-02	68-09		64	
Cottonwood-Walnut Creek	64-06	75-06		52	
Crow & Broad Canyons & Placitas Arroyo	64-06	66-01		56	
Tucumcari Draw	64-10	69-01		57	
Running Water Draw	65-01	68-11	Administered by TX	55	
Eagle-Tumbleweed Draw	65-05	71-09		72	
Trujillo, Montoya, Tierra Blanca, and Rincon	65-05		87-12 Terminated	66	9009
T or C-Williamsburg Arroyos	66-12	70-11		70	
Belen-Los Lunas	68-02		75-12 Terminated	35	
Espanola-Rio Chama	68-02	76-06		67	
Cornudas, North and Culp Draws	68-09	69-10	Administered by TX	69	
Sandias	69-07		77-03 Terminated	62	
Zuni Pueblo	71-06	75-06		84	9014

Total Number of Projects Authorized for Planning is 42 plus two Pilot Watersheds.

TABLE 2 (Cont).

PROJECTS AUTHORIZED FOR PLANNING
GEOGRAPHICAL INFORMATION

Page 2

Watershed Project Name	Area_Ac County	Second_Co	Field_Office	SWCD
Sandia Mountain Tribes	21000 Sandoval		Albuquerque	Coronado
Upper Rio Hondo Tribes	256000 Lincoln		Capitan	Upper Hondo
Hatch Valley Arroyos	14521 Sierra	Dona Ana	T or C	Caballo
Dona Ana Arroyos	6950 Dona Ana		Las Cruces	La Union
Upper Rio Penasco	128000 Otero		Alamogordo	Otero
Zuber Draw	115840 Chaves		Hagerman	Hagerman-Dexter
Tramperos Creek	136320 Union	Harding	Roy	Ute Creek
Upper Dry Cimarron	113800 Union	Colfax	Clayton	Northeastern
Pojoaque Creek	128620 Santa Fe		Santa Fe	Santa Fe-Pojoaque
Santa Cruz River	117180 Santa Fe	Rio Arriba	Santa Fe	Santa Fe-Pojoaque
Pecos Arroyo	47808 San Miguel		Las Vegas	Tierra y Montes
Prop Canyon and Tributaries	19162 Cibola		Grants	Lava
Saltwater Creek	21529 Colfax		Raton	Colfax
Caballo Arroyos	7680 Sierra	Dona Ana	T or C	Caballo
Upper Gila Valley Arroyos No. 1	27000 Grant		Silver City	Grant
Tortugas Arroyos	16256 Dona Ana		Las Cruces	La Union
Fillmore Arroyos	18500 Dona Ana		Las Cruces	La Union
Lemitar-Polvadera	30980 Socorro		Socorro	Socorro
North Dry Cimarron	242260 Union	Las Animas, CO	Clayton	Northeastern
South Dry Cimarron	212244 Union		Clayton	Northeastern
Bloomfield Arroyo	9200 San Juan		Aztec	San Juan
Hackberry Draw	12800 Eddy		Carlsbad	Carlsbad
Apache-Brazito-Mesquite Arroyos	39660 Dona Ana		Las Cruces	La Union
Avalon-Alacran	8640 Eddy		Carlsbad	Carlsbad
Cass Draw	31494 Eddy		Carlsbad	Carlsbad
Upper Frisco	236160 Catron		Reserve	San Francisco
Anthony Arroyo	4032 Dona Ana		Las Cruces	La Union
Eagle Creek	36742 Otero	Lincoln	Capitan	Upper Hondo
Lauson-Breedlove Arroyo	6935 Dona Ana		Las Cruces	La Union
Sebastian Martin-Black Mesa	109286 Rio Arriba		Espanola	East Rio Arriba
Corrales	54720 Sandoval	Bernalillo	Albuquerque	Central Rio Grande
Sibley, Green, Jaralosa, & Candler Arroyos	121018 Dona Ana	Sierra	T or C	Caballo
Cottonwood-Walnut Creek	228326 Eddy	Chaves	Artesia	Central Valley
Crow & Broad Canyons & Placitas Arroyo	134600 Dona Ana	Sierra	T or C	Caballo
Tucumcari Draw	10000 Quay		Tucumcari	Canadian River
Running Water Draw	126000 Pärmer, TX	Curry	Clovis	Central Curry
Eagle-Tumbleweed Draw	182800 Chaves	Eddy	Artesia	Central Valley
Trujillo, Montoya, Tierra Blanca, and Rincon	162048 Dona Ana	Sierra	T or C	Caballo
T or C-Williamsburg Arroyos	19048 Sierra		T or C	Sierra
Belen-Los Lunas	69760 Valencia		Los Lunas	East Valencia
Espanola-Rio Chama	146850 Rio Arriba		Espanola	East Rio Arriba
Cornudas, North and Culp Draws	177600 Hudspeth, TX	Otero	Alamogordo	Otero
Sandias	59315 Sandoval	Bernalillo	Albuquerque	Coronado
Zuni Pueblo	12786 McKinley		Gallup	McKinley
Total Area Authorized for Planning is 3,681,470 Acres				

TABLE 3. APPLICATIONS FOR WATERSHED PROJECTS
October 1988

Watershed Project Name	Appl Date	Invest Report	Comment	Map_No	Proj_No
Sandia Mountain Tribs	53-08		Pilot Watershed	P2	
Upper Rio Hondo Tribs	53-09		Pilot Watershed	P1	
Hatch Valley Arroyos	54-11			1	
Upper Rio Penasco	54-11			2	
Dona Ana Arroyos	55-01			3	
Pojoaque Creek	55-01	56-04		5	
Saltpeter Creek	55-01	57-02		7	
Santa Cruz River	55-01			6	
Lower Rio Penasco	55-03	55-12	84-08 Appl Returned	12	
Middle Rio Penasco	55-03	62-02	84-08 Appl Returned	11	
Arroyo Grande	55-04	55-06	77-05 Appl Withdrawn	8	
Tramperos Creek	55-05			13	
Zuber Draw	56-02			4	
South Dry Cimarron	56-03	56-06		14	
Pecos Arroyo	56-09			15	
Cianguilla Creek	56-10		77-03 Appl Withdrawn	18	
Carrizozo Creek	56-11	66-06	77-03 Appl Withdrawn	19	
Monia Creek	56-11		77-03 Appl Withdrawn	20	
Upper Dry Cimarron	56-11	58-06		17	
North Dry Cimarron	57-01	59-01		16	
Carrizozo Creek	57-02	63-08	77-11 Appl Withdrawn	22	
Corrumpa Creek	57-02		77-03 Appl Withdrawn	21	
Prop Canyon and Tributaries	57-03			24	
Upper Frisco	57-05	62-02		25	
Perico Creek	57-06		77-03 Appl Withdrawn	26	
Upper Gila Valley Arroyos No. 1	57-07			29	
Turley-Deerman	57-09		Appl Withdrawn, Combined into #59	28	
Tortugas Arroyos	57-10			27	
Upper Mora Valley	57-10	64-06	77-03 Appl Withdrawn	30	
Caballo Arroyos	57-12			31	
Belen-Los Lunas	58-04			35	
Fillmore Arroyos	58-04			33	
Leasburg Arroyos	58-04	64-03	84-08 Appl Ret'd, Combined into #23	32	
San Mateo-Grants Canyon	58-05	76-04	84-08 Appl Returned	34	
Lemitar-Polvadera	58-06	59-01	61-09 Terminated, Combined into #87	36	
North Alameda Arroyo	58-07		77-03 Appl Withdrawn	37	
Apache-Brazito-Mesquite Arroyos	58-11			38	
Lauson-Breedlove Arroyo	58-12			39	
Central Lea	59-01	65-06	84-08 Appl Returned	41	
Gary-Winder-Haynor Arroyos	59-03	63-03	84-08 Appl Returned	42	
Avalon-Alacran	59-09			44	
Cass Draw	59-09			43	
Hackberry Draw	59-09			45	
Alamo Canyon	59-11	62-05	84-08 Appl Returned	46	
Sebastian Martin-Black Mesa	59-11	62-03		47	
Ojo Caliente	60-02	64-12	84-08 Appl Returned	49	

TABLE 3 (Cont). APPLICATIONS FOR WATERSHED PROJECTS

Watershed Project Name	Appl Date	Invest Report	Comment	Map_No	Proj_No
Pajarito Arroyos	60-02	62-07	77-05 Appl Withdrawn	48	
Bloomfield Arroyo	60-04			10	
Eagle Creek	60-06		65-01 Terminated, Combined into #80	50	
North Spring River	60-10	62-03	84-08 Appl Ret'd, USACE Project	9	
Garita Creek	60-11		77-03 Appl Withdrawn	51	
Cottonwood-Walnut Creek	61-08	63-04		52	
Upper Valley Arroyos	61-10	63-03	84-08 Appl Ret'd	53	
Corrales	61-11			54	
Anthony Arroyo	62-06			40	
Crow & Broad Canyons & Placitas Arroyo	62-06	62-09		56	
Running Water Draw	62-06		Administered by TX	55	
Tucumcari Draw	62-07	62-12		57	
Taos Creek	62-11	63-10	64-11 Appl Withdrawn	58	
La Union Arroyos	62-12	72-03	84-08 Appl Ret'd, Includes #28	59	
Carrizo Creek	63-01	63-10	Appl Withdrawn, Combined into #80	61	
Embudo River	63-01	64-06	77-05 Appl Withdrawn	60	
Pole-Zuni Canyon	63-02	76-04	84-08 Appl Returned	63	
Sandias	63-02	63-08		62	
Sibley, Green, Jaralosa, & Candler Arroyos	63-03	63-05		64	
Chico Rico	63-04	71-04	77-02 Appl Withdrawn	71	
Little Rio Grande	63-04	54-06	77-05 Appl Withdrawn	65	9009
Trujillo, Montoya, Tierra Blanca, and Rincon	63-05	64-01		66	
Espanola-Rio Chama	63-07	64-09		67	
San Cristobal	63-07			68	
T or C-Williamsburg Arroyos	64-04	65-10	84-08 Appl Returned	70	
Eagle-Tumbleweed Draw	64-06	64-10		72	
Vermejo River	64-10		77-03 Appl Withdrawn	73	
Hammond Conservancy District	65-03	72-01	84-08 Appl Returned	74	
Silver City	65-04	68-06	84-08 Appl Returned	75	
Rio San Jose	65-05	76-04	84-08 Appl Returned	76	
Bear Creek	65-06		84-08 Appl Returned	77	
Cornudas, North and Culp Draws	65-08		Administered by TX	69	
San Miguel Arroyos	65-11	72-03	84-08 Appl Returned	78	
Hampton, Aztec, School & Estes Arroyos	65-12	69-04	77-12 Appl Withdrawn	79	
Gallinas River (Upper)	67-02	68-08	84-08 Appl Returned	81	
Ruidoso	67-05	68-11	84-08 Appl Ret'd, Includes #50, #61	80	
Viriden-Duncan Valley	68-08	70-05	84-08 Appl Returned	82	
Rito Leche-Nacimiento	69-06	69-07	84-08 Appl Ret'd	83	
Zuni Pueblo	69-09			84	9014
Dark Canyon	69-11		84-08 Appl Returned	85	
McKitterick Draw	69-11		84-08 Appl Returned	86	
Midway	71-05	72-06	84-08 Appl Ret'd, Includes #36	87	
Alvillar Arroyos	71-06	72-02	84-08 Appl Ret'd, Includes #32	23	
Sandhill Arroyo	74-09		84-08 Appl Returned	88	
Largo-Agua Fria	87-10	88-04	Plan'g Authorization Requested	89	9015

Total Number of Applications Received and Approved by the State Engineer is 89 plus the two pilot watersheds.

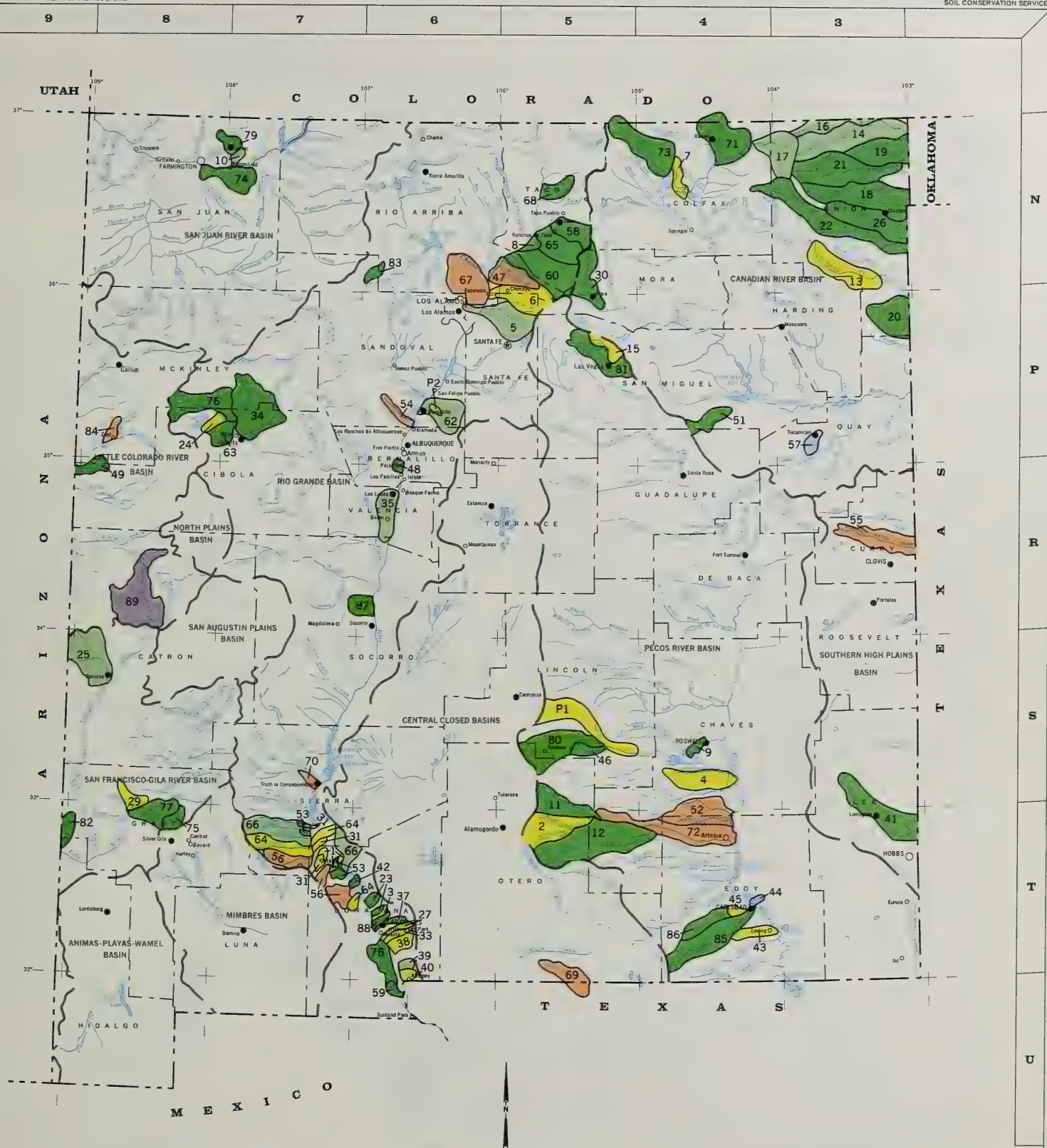
TABLE 3 (Cont). APPLICATIONS FOR WATERSHED PROJECTS
GEOGRAPHICAL INFORMATION

Watershed Project Name	Area_Ac	County	Second_Co	Field_Office	SWCD
Sandia Mountain Tribes	21000	Sandoval		Albuquerque	Coronado
Upper Rio Hondo Tribes	256000	Lincoln		Capitan	Upper Hondo
Hatch Valley Arroyos	14521	Sierra	Dona Ana	T or C	Caballo
Upper Rio Penasco	128000	Otero		Alamogordo	Otero
Dona Ana Arroyos	6950	Dona Ana		Las Cruces	La Union
Pojoaque Creek	128620	Santa Fe		Santa Fe	Santa Fe-Pojoaque
Saltpeter Creek	21529	Colfax		Raton	Colfax
Santa Cruz River	117180	Santa Fe	Rio Arriba	Santa Fe	Santa Fe-Pojoaque
Lower Rio Penasco	189310	Otero	Chaves	Artesia	Penasco
Middle Rio Penasco	241690	Otero	Chaves	Artesia	Penasco
Arroyo Grande	9080	Taos		Taos	Taos
Tramperos Creek	136320	Union	Harding	Roy	Ute Creek
Zuber Draw	115840	Chaves		Hagerman	Hagerman-Dexter
South Dry Cimarron	212244	Union		Clayton	Northeastern
Pecos Arroyo	47808	San Miguel		Las Vegas	Tierra y Montes
Cianguilla Creek	248317	Union		Clayton	Northeastern
Carrizozo Creek	123059	Union		Clayton	Northeastern
Monta Creek	139776	Union		Clayton	Northeastern
Upper Dry Cimarron	113800	Union		Clayton	Northeastern
North Dry Cimarron	242260	Union		Clayton	Northeastern
Carrizozo Creek	250000	Union		Clayton	Northeastern
Corrumpa Creek	249000	Union		Clayton	Northeastern
Prop Canyon and Tributaries	19162	Cibola		Grants	Lava
Upper Frisco	236160	Catron		Reserve	San Francisco
Perico Creek	195200	Union		Clayton	Northeastern
Upper Gila Valley Arroyos No. 1	27000	Grant		Silver City	Grant
Turley-Deerman	2040	Dona Ana		Las Cruces	La Union
Tortugas Arroyos	16256	Dona Ana		Las Cruces	La Union
Upper Mora Valley	121882	Mora		Las Cruces	La Union
Caballo Arroyos	7680	Sierra	Dona Ana	Mora	Western Mora
Belen-Los Lunas	69760	Valencia		T or C	Caballo
Fillmore Arroyos	18500	Dona Ana		Los Lunas	East Valencia
Leasburg Arroyos	12720	Dona Ana		Las Cruces	La Union
San Mateo-Grants Canyon	213000	Cibola		Las Cruces	La Union
Lemitar-Polvadera	30980	Socorro		Grants	Lava
North Alameda Arroyo	9330	Dona Ana		Socorro	Socorro
Apache-Brazito-Mesquite Arroyos	39660	Dona Ana		Las Cruces	La Union
Lauson-Breedlove Arroyo	6935	Dona Ana		Las Cruces	La Union
Central Lea	237363	Lea	Chaves	Lovington	Lea
Gary-Winder-Haynor Arroyos	3870	Dona Ana		Las Cruces	La Union
Avalon-Alacran	8640	Eddy		Carlsbad	Carlsbad
Cass Draw	31494	Eddy		Carlsbad	Carlsbad
Hackberry Draw	12800	Eddy		Carlsbad	Carlsbad
Alamo Canyon	35674	Lincoln	Otero	Capitan	Upper Hondo
Sebastian Martin-Black Mesa	109286	Rio Arriba		Espanola	East Rio Arriba
Ojo Caliente	30410	Cibola	McKinley	Gallup	McKinley

TABLE 3 (Cont). APPLICATIONS FOR WATERSHED PROJECTS
GEOGRAPHICAL INFORMATION

Watershed Project Name	Area_Ac	County	Second_Co	Field Office	SMCD
Pajarito Arroyos	11200	Bernalillo		Albuquerque	Central Rio Grande
Bloomfiled Arroyo	9200	San Juan		Aztec	San Juan
Eagle Creek	36742	Otero		Capitan	Upper Hondo
North Spring River	26189	Chaves	Lincoln	Roswell	Chaves
Garita Creek	50000	San Miguel		Las Vegas	Tierra y Montes
Cottonwood-Walnut Creek	228326	Eddy	Guadalupe	Artesia	Central Valley
Upper Valley Arroyos	10940	Dona Ana	Sierra	T or C	Caballo
Corrales	54720	Sandoval	Bernalillo	Albuquerque	Central Rio Grande
Anthony Arroyo	4032	Dona Ana		Las Cruces	La Union
Crow & Broad Canyons & Placitas Arroyo	134600	Dona Ana	Sierra	T or C	Caballo
Running Water Draw	126000	Parmer, TX	Curry	Clovis	Central Curry
Tucumcari Draw	10000	Guay		Tucumcari	Canadian River
Taos Creek	55040	Taos		Taos	Taos
La Union Arroyos	92973	Dona Ana		Las Cruces	La Union
Carrizo Creek	15720	Otero		Capitan	Upper Hondo
Embudo River	203372	Taos	Lincoln	Espanola	East Rio Arriba
Pole-Zuni Canyon	67000	Cibola	Rio Arriba	Grants	Lava
Sandias	59315	Sandoval	Bernalillo	Albuquerque	Coronado
Sibley, Green, Jaralosa, & Candler Arroyos	121018	Dona Ana	Sierra	T or C	Caballo
Chico Rico	231040	Colfax	Las Animas, CO	Raton	Colfax
Little Rio Grande	128038	Taos		Taos	Taos
Trujillo, Montoya, Tierra Blanca, and Rincon	162048	Dona Ana	Sierra	T or C	Caballo
Espanola-Rio Chama	146850	Rio Arriba		Espanola	East Rio Arriba
San Cristobal	11040	Taos		Taos	Taos
T or C-Williamsburg Arroyos	19048	Sierra		T or C	Sierra
Eagle-Tumbleweed Draw	182800	Chaves	Eddy	Artesia	Central Valley
Vermejo River	225555	Colfax		Raton	Colfax
Hammond Conservancy District	112000	San Juan		Aztec	San Juan
Silver City	18680	Grant	McKinley	Silver City	Grant
Rio San Jose	224600	Cibola		Grants	Lava
Bear Creek	106240	Grant		Silver City	Grant
Cornudas, North and Culp Draws	177600	Hudspeth, TX	Otero	Alamogordo	Otero
San Miguel Arroyos	92000	Dona Ana		Las Cruces	La Union
Hampton, Aztec, School & Estes Arroyos	144656	San Juan		Aztec	San Juan
Gallinas River (Upper)	198669	San Miguel		Las Vegas	Tierra y Montes
Ruidoso	169400	Lincoln	Otero	Capitan	Upper Hondo
Virde-Duncan Valley	244250	Hidalgo	Grant	Lordsburg	Hidalgo
Rito Leche-Nacimiento	11500	Sandoval	Rio Arriba	Cuba	Cuba
Zuni Pueblo	12786	McKinley	Otero	Gallup	McKinley
Dark Canyon	237440	Eddy		Carlsbad	Carlsbad
McKitterick Draw	53120	Eddy		Socorro	Socorro
Midway	67000	Socorro		Las Cruces	La Union
Alvillar Arroyos	20344	Dona Ana		Las Cruces	La Union
Sandhill Arroyo	10000	Dona Ana		Dati	Quemado
Largo-Agua Fria	212600	Catron			

Total Area included in the Applications is 9,043,797 Acres.

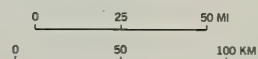


LEGEND

- COMPLETED PROJECTS
- OPERATIONAL PROJECTS
- PROJECTS IN PLANNING
- PROJECTS WITH APPLICATION
- DEAUTHORIZED PROJECTS
- TERMINATED PROJECTS
- PROJECTS WITH APPLICATIONS WITHDRAWN OR RETURNED

WATERSHED AND FLOOD PREVENTION PROJECTS NEW MEXICO

1988



BASE COMPILED FROM U.S.G.S. NATIONAL ATLAS 1:1,000,000
AND NEW MEXICO HIGHWAY MAPS, ALBERS EQUAL AREA
PROJECTION.

SCS No.

OPERATIONAL PROJECTS

PROJECTS IN PLANNING

None

PROJECTS WITH APPLICATION

89 Largo-Agua Fria

DEAUTHORIZED PROJECTS

44 Avalon-Alacran

57 Tucumcari Draw

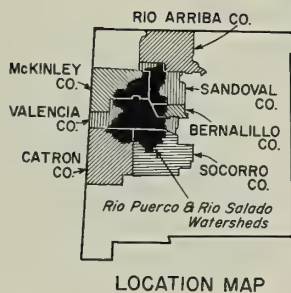
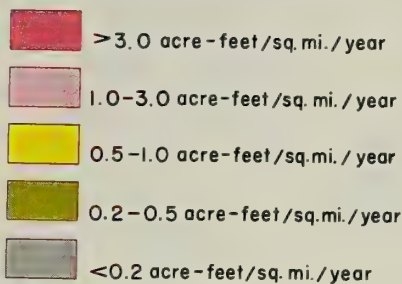
TERMINATED PROJECTS

5	Pojoaque Creek
10	Bloomfield Arroyo
14	South Dry Cimarron
16	North Dry Cimarron
17	Upper Dry Cimarron
25	Upper Frisco
35	Belen-Los Lunas
36	Lemitar-Polvadera (Combined with No. 87)
39	Lauson Breedlove
50	Eagle Creek (Combined with No. 80)
62	Sandias (Contains No. P2)
66	Trujillo, Montoya, Tierra Blanca and Rincon Arroyos

8

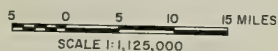
8	Arroyo Grande
9	North Spring River
11	Middle Rio Penasco
12	Lower Rio Penasco
18	Cieneguilla Creek
19	Carrizozo Creek
20	Monia Creek
21	Corrumpa Creek
22	Carrizo Creek
23	Alvillar Arroyos
26	Perico Creek
28	Turley-Deerman (Combined with No. 59)
30	Upper Mora River
32	Leasburg Arroyos (Combined with No. 23)
34	San Mateo-Grants Canyon
37	North Alameda Arroyo
41	Central Lea
42	Gary-Winder-Haynor Arroyos
46	Alamo Canyon
48	Pajarito Arroyos
49	Ojo Caliente
51	Garita Creek
53	Upper Valley Arroyos
58	Taos Creek
59	La Union Arroyos
60	Embudo River
61	Carrizo Creek (Combined with No. 80)
63	Pole-Zuni Canyons
65	Little Rio Grande
68	San Cristobal
71	Chico Rico
73	Vermejo River
74	Hammond Conservancy Dist.
75	Silver City Watershed
76	Rio San Jose
77	Bear Creek
78	San Miguel Arroyos
79	Hampton, Aztec, School, Williams and Estes Arroyos
80	Ruidoso
81	Gallinas River
82	Virден-Duncan Valley
83	Rito Leche-Nacimiento
85	Dark Canyon
86	McKittrick Draw
87	Midway
88	Sandhill Arroyo

GROSS EROSION RATES



PRESENT GROSS EROSION
RIO PUERCO AND RIO SALADO WATERSHEDS
BERNALILLO, CATRON, MCKINLEY, RIO ARRIBA, SANDOVAL,
SOCORRO AND VALENCIA COUNTIES, NEW MEXICO

JULY 1971



LEGEND

SD SOUTHERN DESERTIC BASINS,
PLAINS AND MOUNTAINS

- 51 Rockland-Lehman
- 52 Gila-Glendale-Vinton
- 53 Nickle-Upton-Tres Hermanos
- 60 Akela-Kermit-Lava Flows
- 63 Dona Ana-Jal-Headquarters-Banbar
- 65 Caliza-Bluepoint-Rough Broken Land
- 66 Nickle-Strauss
- 67 Madurez-Wink-Bluepoint
- 68 Embudo-Tijeras
- 69 Cascojo-Fruitland-Rough Broken Land
- 75 Puerto Soils

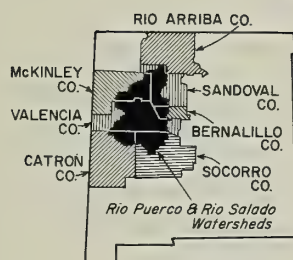
RM-1

SOUTHERN ROCKY MOUNTAINS

RM-2ARIZONA AND NEW MEXICO
MOUNTAINS**WP** NEW MEXICO AND ARIZONA
PLATEAUS AND MESAS

- 70 Lava Flows
- 84 Penistaja-Progresso-Berent-Sandstone Outcrop
- 85 Little-Los Lucas-Christianburg
- 86 Rockland-Travessilla-San Mateo
- 87 Cascojo-Rough Broken Land-Panky-Harvey-Bernal-Travessilla-Prewitt

Prieta-Calabasas-Rockland
Navajo-Christianburg-San Mateo
Progresso-Canoncito-Los Lucas
Del Rio-Penistaja-Clovis
Canoncito-Calabasas-Dean-Pedrick
Oro Grande-Lonti-Rough Broken Land
Luzena-Rockland
Lonti-Pastura
Fruitland-Green River-Leo



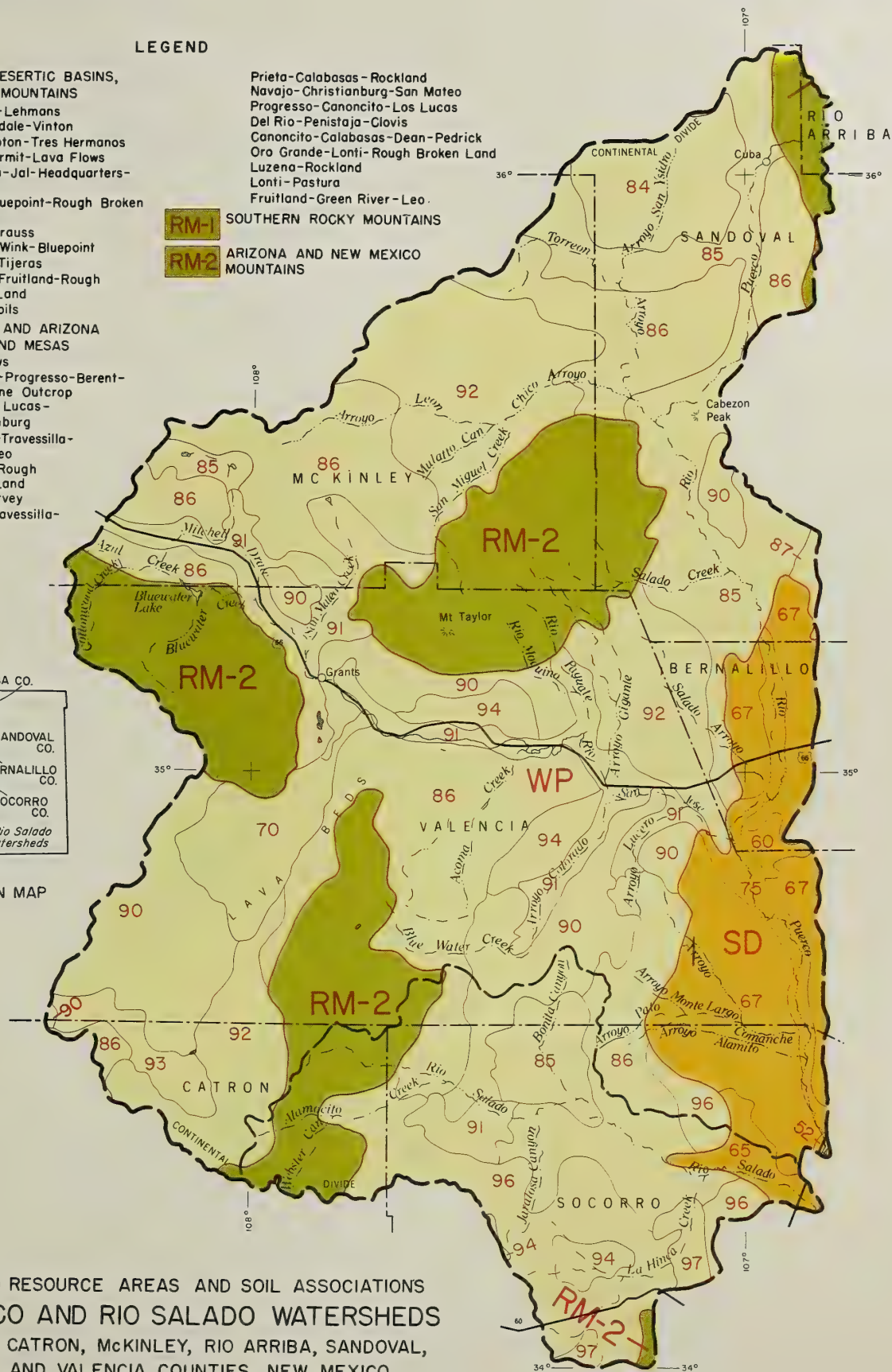
LOCATION MAP



MAJOR LAND RESOURCE AREAS AND SOIL ASSOCIATIONS
RIO PUERCO AND RIO SALADO WATERSHEDS
BERNALILLO, CATRON, McKINLEY, RIO ARRIBA, SANDOVAL,
SOCORRO AND VALENCIA COUNTIES, NEW MEXICO

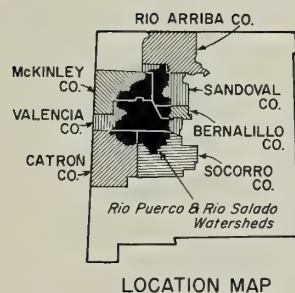
JULY 1971

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SCALE 1:1,125,000



LEGEND MANAGEMENT AREAS

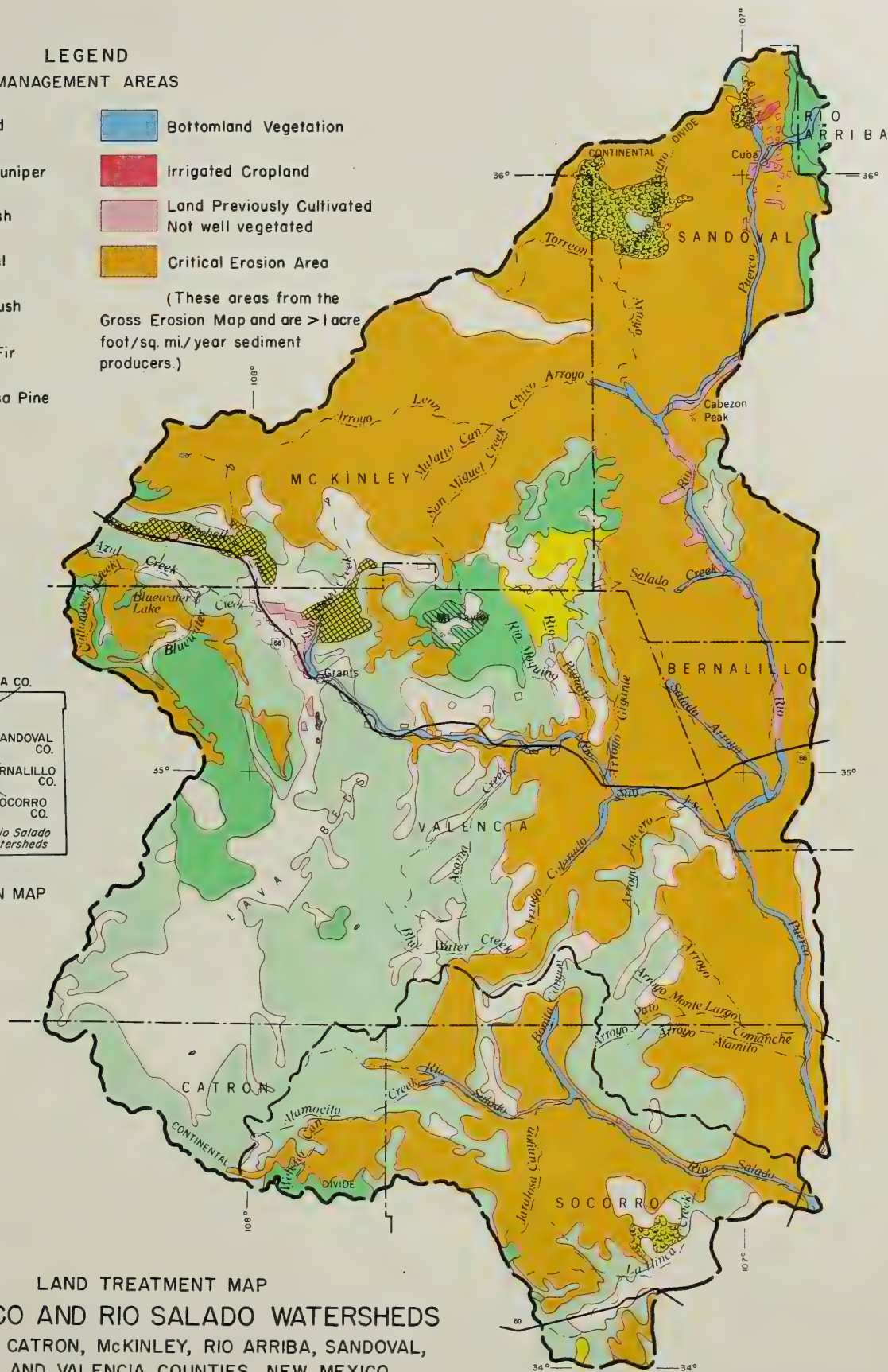
	Grassland		Bottomland Vegetation
	Pinyon-Juniper		Irrigated Cropland
	Sagebrush		Land Previously Cultivated Not well vegetated
	Chaparral		Critical Erosion Area
	Rabbitbrush	(These areas from the Gross Erosion Map and are > 1 acre foot/sq. mi./year sediment producers.)	
	Spruce-Fir		
	Ponderosa Pine		
	Aspen		



LAND TREATMENT MAP RIO PUERCO AND RIO SALADO WATERSHEDS BERNALILLO, CATRON, McKINLEY, RIO ARRIBA, SANDOVAL, SOCORRO AND VALENCIA COUNTIES, NEW MEXICO

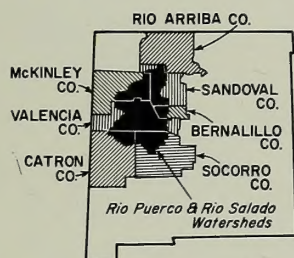
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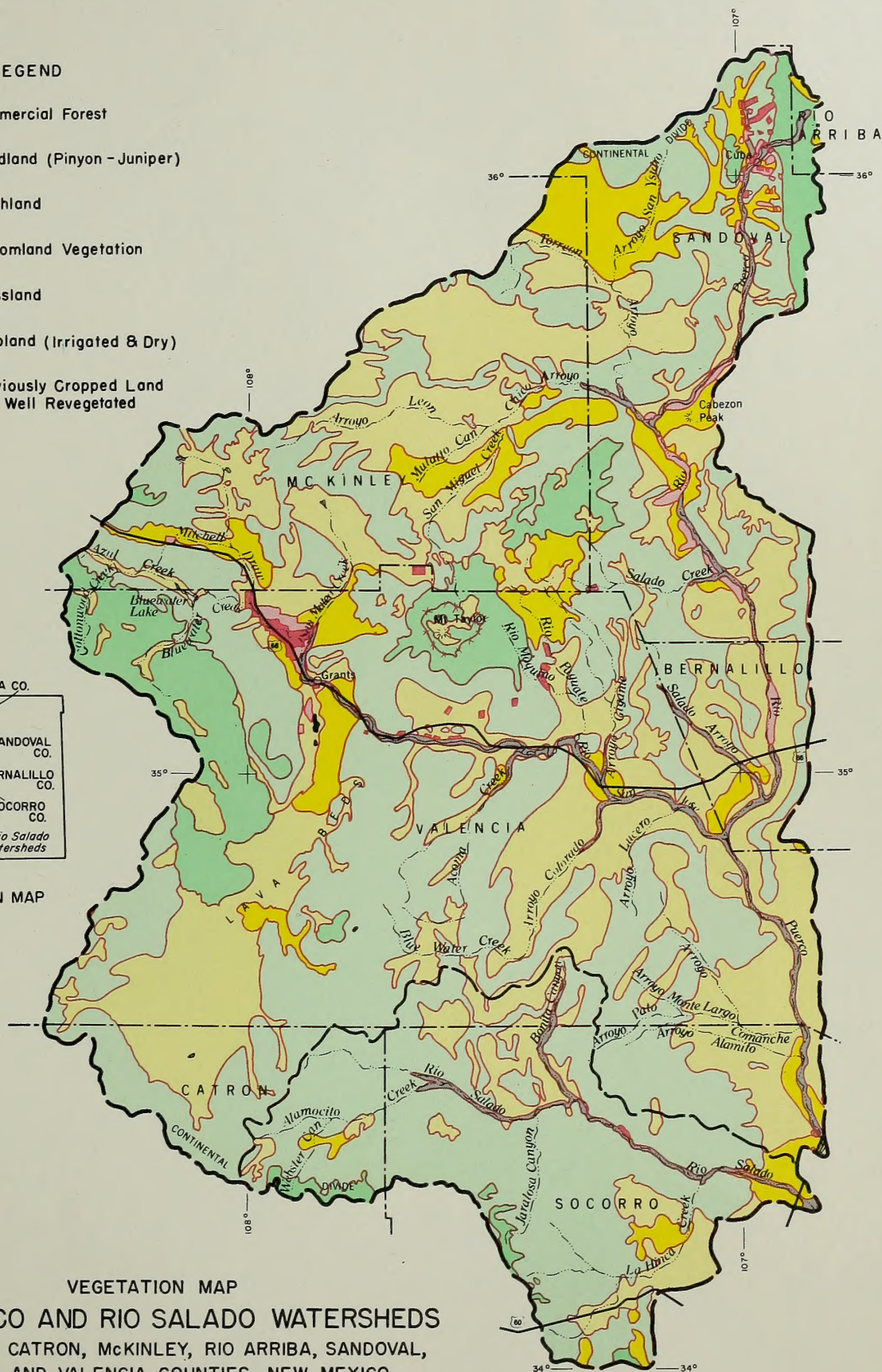


LEGEND

- Commercial Forest
- Woodland (Pinyon - Juniper)
- Brushland
- Bottomland Vegetation
- Grassland
- Cropland (Irrigated & Dry)
- Previously Cropped Land Not Well Revegetated



LOCATION MAP



VEGETATION MAP

RIO PUERCO AND RIO SALADO WATERSHEDS

BERNALILLO, CATRON, MCKINLEY, RIO ARRIBA, SANDOVAL,
SOCORRO AND VALENCIA COUNTIES, NEW MEXICO

JULY 1971

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SCALE 1:1,125,000

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